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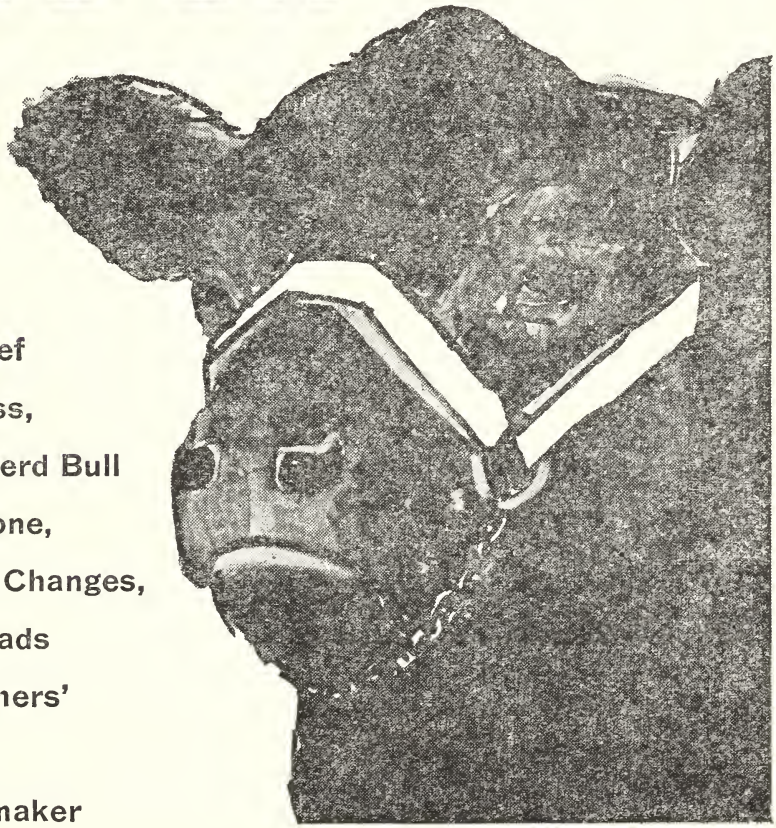
BIG'UN



The Beef Business, From Herd Bull to T-bone, Grows, Changes, Still Leads as Farmers' Prime Moneymaker

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BIG'UN:BEEF

Change Comes With Growth as Feedlots Flourish and Consumers Shift Buying to the Better Grades

Beef is big today, no doubt about it. Receipts from a record slaughter ran to $10.4 billion last year, making it our biggest cash commodity.

To hold this No. 1 position, the industry has grown steadily since World War II.

Keeping pace with the thriving postwar economy and a 40-percent population boom, the volume of beef output has grown an average annual rate of over 4 percent. Last year, it reached a record 19.7 billion pounds, or double the output of 1946.

This growth has meant changes within the beef industry. Consider the makeup of the cattle population: At the start of this year, only a fifth of the cattle inventory of 108.5 million head was dairy cattle, compared to about 50 percent two decades ago. Meanwhile, beef cattle numbers had doubled to nearly 80 percent of the inventory.

Big changes have also occurred in the makeup of beef produced. Steer beef production has about doubled since World War II and its proportion of the total has ranged mostly between 55 and 60 percent. Heifer beef output more than quadrupled during the last 20 years and its proportion of the total about doubled to around one-fifth in recent years.

As beef cattle numbers have continued to increase and dairy to decline, heifer calves have increasingly become destined for the feedlot rather than for veal or the milk barn. The sharp decline in veal output underscores this trend.

Cow beef's average volume has not changed much in the past 20 years.

The Big One Wins Hands Down as Farm Cash Earner

Beef is the biggest single source of income for U.S. farmers. Ring up the grand totals for the past 2 years, and you'll see why.

First, itemize nationally the cash receipts from marketings for 10 major commodities last year. Cotton lint, broilers, and tobacco earned over $1 billion each. Four commodities—corn, soybeans, eggs, and wheat—returned over $2 billion apiece. But three more, from the livestock and livestock product group, led the field. Hogs accounted for $4 billion in receipts, dairy products for $5.5 billion, and cattle and calves for more than both the others combined: some $10.4 billion!

This last sum represents better than 40 percent of the $24.7 billion that farmers amassed for livestock and related products in 1966, and nearly a quarter of the $42.9 billion they received for all farm products.

Now compare these totals with the stubs from 2 years ago. You'll find that beef had the biggest absolute growth in value of cash receipts. For, with the volume of cattle and calf marketings up 4 percent from 1965, and prices averaging better than $2 higher per hundredweight in 1966, cash receipts jumped by $1.5 billion.

Beef thus made the biggest contribution to the $2.8 billion growth of livestock and related products, and it outstripped the $0.9 billion gained by all crops.

Itemize the beef total once more, this time by State. Each one makes a sizable income from the sale of cattle and calves. Last year in fact, over half of them had cash receipts from cattle marketings of over $100 million each.

Iowa stole the show, qualifying for the billion-dollar category, with $1.1 billion. Texas, Nebraska, Kansas, and California followed in close order, earning over $700 million each, while Illinois and Colorado were right around $500 million.

But despite this long-range plateau, production has seesawed from year to year, influenced by weather conditions, feed costs, and calf prices, as well as shifts in the rate of decline in dairy animals. With the increases for steer and heifer beef, cow beef output has dropped from 40 to 20 percent of the total.

The key to many of the changes experienced by the cattle industry lies in a growing consumer appetite for higher quality meat. Cattle producers have met this demand by increasing sharply the production of fed beef.

To do this, they have made some dramatic changes in the past 20 years. The job of raising the quality of the Nation's beef output has been largely accomplished through the feedlot. Fed beef output has nearly quadrupled in the postwar years, accounting for most of the gain in total beef production during this period.

Twenty years ago, fed beef accounted for a little more than a third of the country's beef output. Last year, about two-thirds of the beef produced was fed beef.

The bulk of fed beef production includes the top three grades—Prime, Choice, and Good. Back in 1946, U.S. cattlemen produced about 1.5 million tons of Choice and Prime grade beef, but last year, steak-hungry Americans ate over 5 million tons of these grades.

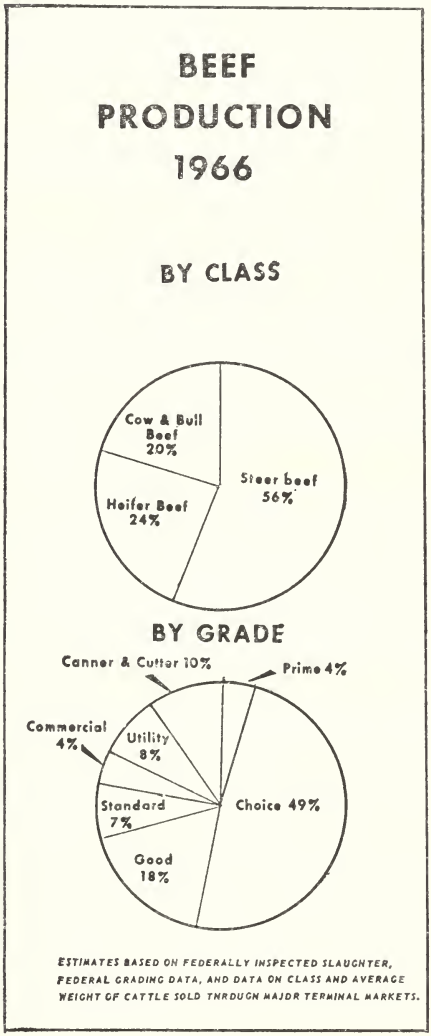
With two-thirds of the beef being fattened off the range, Choice beef production has tripled, approaching 50 percent of total output in recent years.

The volume of good grade beef doubled by the late 1950's, when its share of the output rose to over 27 percent. But this proportion has since dropped and has remained at about 18 percent for the past several years.

Prime grade beef production has also slipped a little relative to total production. This grade accounted for about 4 percent last year, as compared to 5–6 percent for the 1946–48 period.

Grades of Standard and below, which represented nearly half of the production right after World War II, now have about 30 percent of the output.

John Larsen
Economic Research Service



Research Ranch

From bullets to beef—that's the evolution about to take place on the Nebraska prairie.

The 35,000-acre Naval Ammunition Depot near Hastings is being turned into a meat animal research center.

Here, USDA scientists will expand research on cattle, hogs, and sheep.

One important aim will be to find out how to produce animals with more meat and less fat.

For example, some 20 percent of today's Choice beef never makes it to the dinner table. It's sliced off as unused fat. Scientists hope to learn how to reduce this wastage.

BIG'UN:BEEF

More Eaten, More Produced Last Year

A lot of Americans ate an extra helping at dinnertime last year. More likely than not, it was another hamburger or an extra bit of steak.

U.S. beef consumption rose 4 pounds in 1966 to a record high, 103 pounds per person. The extra beef is reflected in the Crop Reporting Board's 1966 livestock slaughter figures.

Total production of red meat in the 48 States during 1966 was about 32.6 billion pounds, a 3-percent increase over 1965. This includes commercial and farm slaughter.

Much of the increase resulted from farmers producing heavier animals. Although the number of hogs slaughtered went down, production of pork went up.

The average live weight of cattle slaughtered in 1966 was 1,009 pounds per animal, 13 pounds heavier than the year before. Average weight of calves slaughtered increased from 235 to 240 pounds, hogs went from 239 to 242, and sheep and lamb slaughter averaged 102 pounds per animal, up 2 pounds from 1965.

Beef: Production rose 5 percent from 1965 to 19.7 billion pounds. Iowa was the leading State with about 4 million head slaughtered; Nebraska and California had 3.4 and 3.1 million head, respectively.

Veal: Veal production was 910 million pounds, down 11 percent from 1965. New York led in calf slaughter with about 900,000 slaughtered. Wisconsin came in second with 734,000. The total number of calves slaughtered declined 12 percent from the 1965 figure.

Pork: Production totaled 11.3 billion pounds, up 2 percent from the year before. The number slaughtered was down 1 percent. Iowa slaughtered the most hogs—16.5 million; Minnesota was second with 5.2 million; Illinois was third and Ohio fourth.

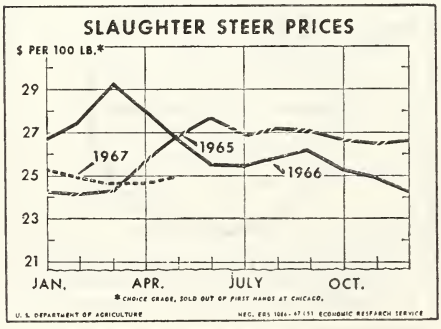
Lamb and mutton: Production was about the same as in 1965—651 million pounds; however, the number of sheep and lambs slaughtered was down 2 percent. California led with 1.8 million, Colorado was second with 1.6 million, and Texas was third with 1.3 million sheep and lambs slaughtered.

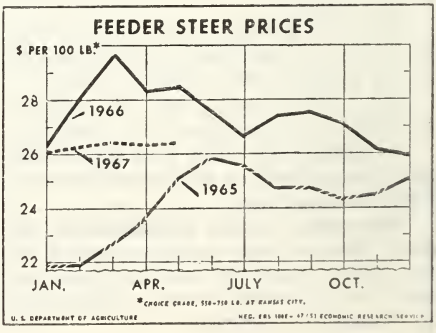
Paul Bascom
Statistical Reporting Service

Depicting the Prices

Fat Cattle: Choice steer prices at Chicago rose to a peak of about $29 per 100 pounds in March of last year. Then they trailed off as the year wore on. Early this year, they were holding close to $25 per 100 pounds.

Feeder Markets: Choice feeder steer prices at Kansas City also peaked early last year. Since then, they have followed much the same course as fed cattle prices, maintaining a slight edge above them.





BIG'UN:BEEF

Western Ranch Profits Mixed for 1966

Many western ranchers last year held back calves and increased the size of their herds.

In the Southwest—Texas, Arizona, and New Mexico—future prospects encouraged ranchers to keep rather than sell many potential breeding animals. As a result, cash receipts on representative ranches were down moderately from 1965, but inventory gains more than made up the difference.

In the Intermountain area—Utah, Nevada, Wyoming, Colorado, Idaho, and Oregon—the inventory of breeding-age cows and heifers at the end of 1966 was slightly higher than at the beginning.

Northern Plains ranchers—those in South Dakota, Montana, and Wyoming—again increased the number of breeding cattle on their ranches.

Here's a brief roundup of 1966 for western ranches:

Southwest—After an uncertain start, range conditions in the area improved considerably. Fall market weights were slightly higher than in 1965. Calf prices were the highest received since 1959.

For Southwestern sheep ranches, the price received per pound of wool averaged about 7 cents higher than in 1965, but Government incentive payments averaged lower, limiting the total rise in prices received to about 2 percent.

Intermountain — Range conditions gradually deteriorated during the grazing season and averaged well below those of the past few years.

Calf crops were off a little from 1965, despite slightly larger breeding herds and a lower death rate of calves.

However, prices received for calves increased 16 percent over 1965 and averaged $26.20 per 100 pounds.

Prices received per pound of wool averaged about 7 percent above 1965.

Northern Plains—Excellent range conditions for cattle early in the year gave way to drought starting in June. However, spring calving conditions were good and calving rates favorable. The drought caused lower livestock marketing weights.

Prices received, the highest since 1962, were 11 percent above 1965.

Worsening range conditions for sheep hurt, despite an excellent lamb crop and the best wool prices in recent years for the area.

Wylie D. Goodsell
Economic Research Service

REPRESENTATIVE WESTERN RANCHES:

Net Incomes for 1965-66

	1965	1966
Southwest:		
Cattle	$6,146	$7,293
Sheep	9,312	11,778
Intermountain area:		
Cattle	8,811	9,982
Sheep	18,158	17,872
Northern Plains:		
Cattle	7,599	7,549
Sheep	14,695	13,217

Exports, Imports

On May 1 this year, a U.S. food retailer buying a dressed beef carcass in Chicago would likely have paid about $37–$38 per 100 pounds for it. But a British retailer buying a like carcass in London the same day would have paid only about $35.

This comparison about tells the story of why the United States exports no more beef than it does. It's worth more sold here.

The story is essentially the same for other red meats. Still, the meat export market—and the big potential—does involve a sizable chunk of trade in hard dollars.

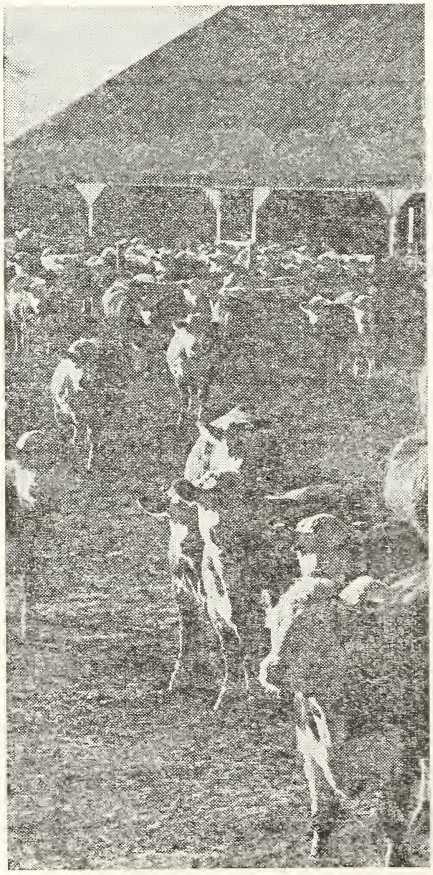
Last year, for example, the United States exported about $419 million worth of meat byproducts, $48 million of meats, and $16 million of live animals. This was a slight increase from 1965's totals of about $405 million for meat byproducts, $47 million for meat, and almost $19 million for live animals.

On the import side in 1966, beef and veal equaled 5.8 percent of U.S. production. This was above 1965's level of 4.8 percent but well below the 1963 record of 9.7 percent.

BIG'UN:BEEF

Would a Feedlot Work on Your Cow-Calf Spread?

Here's an Example



Most farming in the Southern Plains Region of Texas and Oklahoma is specialized—cotton, grain, or range livestock. A look at the feasibility of adding a cattle-feeding enterprise to a cattle ranch operation points out the reason for this. The big bottleneck is feed.

With average yields, as many as 2.5 acres of dry cropland would be required to furnish enough grain and silage to feed one steer 180 days; 1.7 acres to feed a cow in the feedlot 365 days; and 0.2 of an acre to feed a cow during the winter in a feedlot.

On the basis of the estimated feed requirements and assuming no purchases of grain and roughage, just over half the ranches in the Southern Plains Region have sufficient cropland to produce feed for only 100 steers or less for a 180-day feeding period. Only 1 in 10 has enough cropland to produce feed for 500 steers. And only 1 in 25 enough for 1,000 steers.

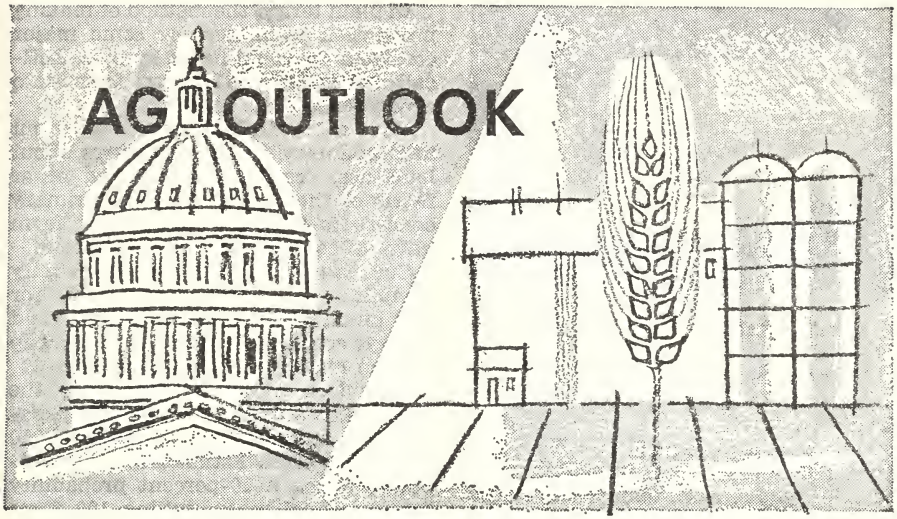
Thus, to operate feedlot enterprises at anywhere near the level of minimum unit costs, these ranches would have to buy additional feed.

This in turn would call for increased capital investment for equipment to handle and store the feed. As a result, the feeding operation would be pushed out of the supplementary income category since it would be competing with other ranch enterprises.

Setup Might Work

There are, however, some situations in which the feedlot enterprise could be added profitably under favorable price-cost relationships. A stocker-feeder program might be added to a range cow-calf program, providing sufficient sorghum stubble and wheat grazing are available. A cow-calf feedlot operation may be a way of increasing ranch size when additional land is unavailable.

Basically, though, the farming and ranching in the Southern Plains Region remains specialized. There are five major types of commercial farms comprising 87 percent of the total commercial farms in this region. Of the five, 34 percent are cotton; 16 percent, cash-grain; 19 percent, livestock ranches; 22 percent, livestock; and 9 percent, general farms.



Based on Information Available May 31, 1967

RECORD WHEAT OUTPUT

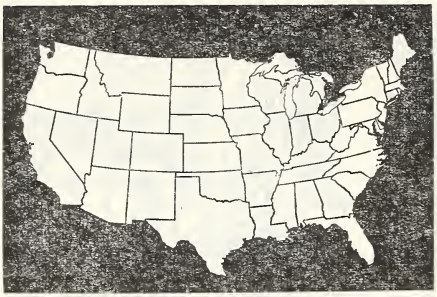
Wheat production in 1967 is expected to set a new record of around 1.5 billion bushels. The total supply for the coming year could be somewhat larger than the 1,848 million bushels available in the current year. Late May prospects for the 1967–68 marketing year (beginning July 1) point to a continued high level of wheat disappearance but with a possible slight to moderate increase in carryover by the summer of 1968. Domestic disappearance in 1967–68 may be at least as large as the 700 million bushels in prospect for 1966–67 and, if wheat feeding were to expand, could be even larger.

LAG IN EXPORTS?

Prospects for commercial exports of wheat in 1967–68 appear less favorable because of the increased supplies indicated in other exporting countries and possibly better crops in some importing countries. Some increase is expected in exports under the Food for Freedom Program. Total U.S. exports of wheat in 1967–68 could vary between 700 and 775 million bushels.

WHEAT PRICE MOVEMENTS

Wheat prices continued well above the price support loan in mid-May and, except for soft red winter, they were above year-earlier levels. Prices during the 1967 harvest period may decline somewhat more than the 5-to-10 cents per bushel decline experienced at harvest in 1964 and 1965, particularly if the indicated record U.S. crop is attained and world wheat prospects continue favorable.



Here's a math teaser for you. How big is the corn crop going to be?

In arriving at an answer, contact only one in every 100 farmers who must be picked purely at random. Make your estimate reliable enough for you and your neighbors to use in making key farming plans. Also, update the figure each month during the growing season.

No fair getting help from your State crop reporting people. They're associated with the Statistical Reporting Service, which estimates production through a highly developed sampling technique, some refined statistical theories, and the cooperation of thousands of farmers.

In plain terms, the method of making production estimates for some major commodities could begin by hypothetically tossing all the Nation's farms into a very large hat.

Have a blindfolded person draw out names. Interview these farmers about land use, crops, livestock, and other facets of their operation. The primary concern is that each and every farm have an equal chance to be selected.

Such a process is termed probability sampling. The idea is the basis for the enumerative and objective yield surveys conducted by SRS as a backup for the mail questionnaire system.

Let's look at the process: Say the Nation has 3 million farms evenly distributed among 3,000 counties—1,000 farms for each. Estimating corn output by using a 10-percent probability sample would mean pulling 100 farm names from the fictional hat for each county.

In each county, the 100 farmers are asked the number of acres of corn growing on their land, if any. From a total of 300,000 answers nationally, a figure is derived, then multiplied by 10 because of the 1-for-10 sampling basis.

Certainly, the SRS role in probability sampling is much more complicated than our example implies. But the principle is largely the same, and it works.

THE SRS SAMPLING IDEA

To estimate a national total, divide the country into thousands of small, known, segments,

Accuracy can be judged by a known margin of error. For the June Enumerative Survey, which helps estimate output of some major crops, sampling errors have averaged about 1 to 2 percent for U.S. totals.

A 1-percent sampling error means that chances are about 2 out of 3 that the sample figure is within 1 percent of the estimate that would have been derived if the same procedures had been used to survey all farms rather than a few.

Instead of putting names in a hat, SRS uses maps and aerial photos. Each State is divided into segments along county, township, or other boundaries, or according to land use, or intensity of farming. These segments are then broken down into still smaller units.

A sampling of segments—a certain number for the Nation, area, and State—is selected by chance. Farmland within the chosen segments is enumerated by a part-time SRS worker who interviews farmers.

This adds up to a lot of sampling and detail work. But the combination of many samplings of very small segments of farmland, together with scientific methods of choosing the samples, and strict procedures for getting data from the samples, pays off in improved accuracy.

In the June Enumerative Survey, for example, about 17,000 segments of land are involved. To get data on them, part-time interviewers might call on 100,000 farmers. The total land area on which data are provided figures out to only about six-tenths of 1 percent of all U.S. farmland.

For the objective yield survey, quite small plots in some of the corn, cotton, wheat, and soybean fields that were in the enumerative survey are examined monthly during the growing season. Crop counts and measurements are handled by the same workers who had done the enumerating.

Last year there were objective yield plots in 3,300 sample cornfields in 29 States, 2,600 cottonfields in 14 States, 1,850 winter wheatfields in 15 States, and 1,200 soybean fields in 11 States.

Minute examination is possible on the sample plots because they're so small: a two-row section 15 feet long for corn, three drill rows 24¼ inches long for wheat, a two-row section 3 feet long for soybeans, and a double-row section 10 feet long for cotton.

Here is the total number of acres used in the objective yield survey for these crops: 15 acres of corn, 7 acres of cotton, 3 acres of soybeans, and one-half acre of wheat.

Because of the scientific basis of the surveys, accurate information is obtained despite the seemingly tiny amount of land area examined.

Modern sampling techniques are necessary because of the vast changes taking place in farming operations, the growing specialization of farms, and the adjustments in marketing procedures.

Because of these changes, the mail questionnaire, used so successfully for years and still the most relied-upon method, often can no longer alone produce a representative sample of responses from farmers. The mail survey supplies excellent information necessary for a complete estimate. But the enumerative and objective yield systems are becoming increasingly important supplements.

then minutely and precisely examine a few, chosen mostly at random.

SPUD SAGA:

From the Exotic Incas to the French Fry

Potato crops around Boise or Bangor can affect prospects for many farmers, processors, retailers, and homemakers from Seattle to Sarasota. The production and marketing of the versatile spud has indeed become complex, affecting all U.S. regions in some way or other.

But, that shouldn't be so surprising, because the potato is a longtime product of the Americas. Its very name is derived from the American Indian "Batatas." Although it has crisscrossed both major oceans many times in the last five centuries, the potato, most botanists agree, was cultivated first by the Incas up in the Peruvian-Bolivian altiplano.

The potato belongs to an exotic botanical family that includes another important native American crop, tobacco. Other relatives are the tomato, the eggplant, and the petunia.

The Andean Indians, who discovered they could store potatoes out of season, may have hit on the earliest convenience food.

Even today their collateral descendants, the Quechuans, similarly subsist mainly on freshly harvested or stored potatoes.

By comparison, the U.S. potato industry obviously has made striking advances. Today, it is an important part of the economy. A highly specialized industry, commercial potato production requires large investment, not only in acreage but also in equipment and technical training.

U.S. potato production centers mostly in Idaho, Maine, California, North Dakota, and Minnesota. But every State produces some potatoes, and potatoes are harvested somewhere in the United States every month of the year.

The main potato-producing areas grow specialized crops, ranging from mealier varieties suitable for baking to those more suitable for boiling or frying.

POTATO ECONOMICS

Potato output last year was record high. Production hit 301 million hundredweight, up 10 million from 1965.

But total disappearance last fall also was up. So, despite record production, storage holdings on January 1 totaled 124.9 million hundredweight, about the same as the year before.

Despite little change in supply, early winter markets were strong and prices much higher than a year ago.

U.S. prices to growers averaged $2.36 per hundredweight in February 1967, up from $2.17 a year earlier. Part of the reason was the prospect of continued heavy losses in stored Idaho potatoes, where a harvest-time freeze severely damaged the crop. Another reason for higher prices could have been the reckoning that the rest of the season would follow much the same course as in recent years—intensive processing and rapid disappearance.

But, if disappearance in Idaho was heavy, it was certainly off sharply in the Midwest and East, where storage conditions were better than in the West and harsh weather slowed movement.

Other price factors were the considerable supply of potatoes from Canada and weaker processor demand.

U.S. processors, faced with record-high finished-product inventories and abundant supplies of raw potatoes still under contract, reacted by cutting back their production.

So prices dropped sharply in late winter. And the average $1.72 to growers in April was a third below a year earlier, the lowest monthly price since the fall of 1963.

Techniques of potato production also have advanced rapidly. No longer is the potato laboriously hand-plugged into individual potato hills or ridges, and painstakingly harvested potato by potato. Instead, automatic equipment on a tractor-drawn vehicle presets the cut seed. Using such equipment, a farmer can plant 50 acres a day, or more.

A host of harvesting equipment also is available. The kind the farmer uses depends on the size of his operation, local topography, characteristics of his fields and soil, his labor supply, and his market. Mechanical equipment is used for harvesting some 80 to 95 percent of the crop in important areas where conditions are suitable.

Thanks partly to mechanization, U.S. potato output per acre has climbed fairly steadily in the postwar years. Yields averaging about 145–150 hundredweight in the early 1950's have recently passed the 200 hundredweight level.

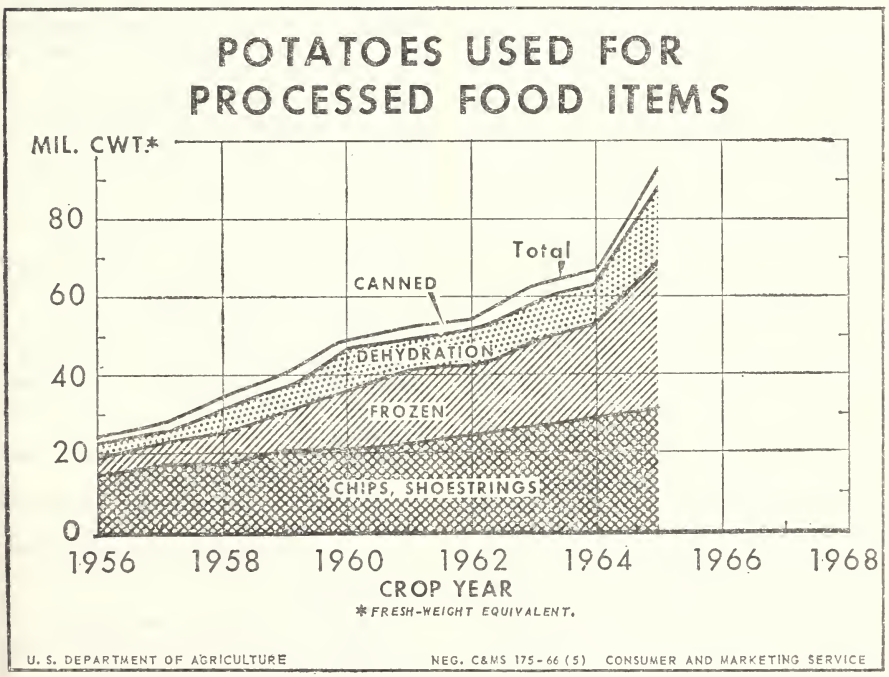
Production, though variable because of weather and the periodic wide swings in prices, also has trended upward—from about 210 million hundredweight in the early 1950's to above 290 million in the last few years.

The level of use also has varied with the supply, but the kind of use has changed remarkably. We're in the era of the french fry and the potato chip. Markets for prepared foods, greatly increasing in the postwar years, have sparked important gains in potato processing, especially for quick-freezing, flaking, dehydrating, and canning.

The increased supplies of convenience forms of potatoes have led to important changes in the average American's use of potatoes. In the last decade or so he has eaten close to 105–110 pounds annually—more and more of the total in processed products.

Nearly 90 percent of the potatoes consumed in 1956 were bought in fresh form. Chips accounted for most of the rest, because freezers and dehydrators really were just getting underway.

But, within the decade, average use per person of canned, dehydrated, and frozen potatoes rose markedly. Last year such use accounted for more than one-fifth of the total, while chips took about one-sixth. On the other hand, use of fresh potatoes was down to 75 percent of the total.



Gap Between Prospective, Actual Plantings Found Fairly Narrow for the Feed Grains

A comparison of prospective plantings for feed grains, as indicated by farmers in March with actual acreages planted for the years 1955–66, reveals that farmers generally follow their plans fairly closely.

Actual acreages planted were much nearer the prospective plantings for corn, oats, and barley than they were for sorghums. There was a general tendency for farmers to plant a little less than indicated by the prospective plantings report.

For each of the grains, actual plantings in about two-thirds of the years fell below the March 1 prospective acreages; acreages planted in about a third of the years were practically the same as indicated or above.

Factors such as weather or economic conditions, Government farm programs and the impact of the March 1 intentions report itself can influence the producers' plans up to the time of seeding.

For the four feed grains combined, the range in plantings as a percentage of prospective acreages was fairly narrow. Actual planting ranged from 96 to 102 percent of actual plantings (excluding 1961 when the feed grain program wasn't announced until late in March). The change in the actual acreage planted was in the same direction as the change indicated by the Prospective Plantings Reports in 11 of the 12 years.

In 7 of the 12 years, farmers planted a little less corn than their March 1 plans indicated. In 1 year they planted more than indicated in March and in 4 years about the same.

With the exception of 1961, the actual corn acreages planted ranged from 95 to 102 percent of the prospective plantings. The change in the acreage of corn planted from the preceding year was in the same direction as indicated by the Prospective Plantings Reports in 10 of the 12 years compared.

The Prospective Plantings Reports indicate the actual acreage to be planted to sorghums with much less accuracy than for the other three feed grains. The acreage planted to sorghums (excluding 1961) ranged from 89 to 113 percent of the prospective acreage. The wider range for sorghums apparently was due principally to greater variability in weather at planting time in the southwestern area of the country where most of the sorghums are grown. Sorghums are frequently planted on abandoned wheat acreage, which also makes for some uncertainty in the acreage that will be available for planting sorghums.

The acreage actually planted to sorghums was below the prospective acreage in 8 years and above it in 4 years.

The prospective acreages of oats and barley made about the same variation from actual plantings as was the case for corn.

Malcolm Clough
Economic Research Service

DUST IS BIG HEADACHE FOR FEED MILLERS

One way to control dust is to sweep it under the rug.

This time-honored method, however, is not adequate for feed mills and grain elevators, where dust collection quickly brings on financial headaches.

Millers who are good housekeepers recognize dust not only as a potential hazard inside a building but also as an air pollutant outside.

Inside control of dust in feed mills is a must if for no other reason than to prevent an explosion. Almost any particles of dust can cause an explosion if they are fine enough, concentrated enough, and properly mixed with oxygen and ignited by a flame or spark.

Good inside dust control also:

—Cuts down labor costs for cleaning.

—Reduces deterioration and wear of bearings and other machinery parts.

—Minimizes the chance that costly, potent microingredients so important in mixed feeds may be lost into the atmosphere.

—Upgrades working conditions and thus attracts high-grade labor.

—Prevents contamination of mixed feeds by drug-containing dusts.

Outside dust control is a serious problem for many feed mills located within town limits.

In some areas, stringent antipollution laws require all air discharged from feed mills to be filtered.

How Much Insurance on Buildings is Enough?

It's a wise farmer who can keep up with the insurance values of the physical property on his farm.

Farmers as a whole today are obtaining more and more insurance, but some may still not be fully protected on their increased investments.

New machinery, improvements to buildings, and inflation have almost doubled insurable farm property values since World War II.

Yet average depreciation of farm capital is high. From 1960 to 1965 it was $4.5 billion per year. From 1940 to 1945 it averaged $1.2 billion. And many farmers simply aren't reducing insurance coverage fast enough on some assets declining in value.

Part of the problem is obsolescence caused by technological improvements. As new models of farm machinery come out, the value of older models declines somewhat the way the value of last year's car does.

Other causes of depreciation are changes in use, wear and tear, deterioration and inadequacy of equipment.

Since some property values go up while others fall, the farmer who thinks he is fully insured may find instead that he is paying for more protection than he is ever likely to get. And both the farmer and the insurance man at times are at fault.

When a policy is written, the value of the property may often be overestimated. The farmer accepts this, thinking he is getting more coverage.

In reality, since the policy probably pays off only on the "actual cash value" at the time of the loss, the same coverage could have been obtained for less.

Similarly, when insurance comes due, usually every 3 years, both farmer and insurance man tend simply to renew the policy rather than reevaluate the property on the basis of appreciation or depreciation.

Coverage often depends on the individual insurance man. Some will not insist that insurance be reduced on obsolete buildings, feeling that it might make for hard feelings with the owner.

Other agents don't like to refuse insurance, especially to customers of long standing.

A more reliable method is basing evaluation on the usefulness of the physical property.

A barn built 30 years ago, for example, with about 10 years of remaining useful life, is being used to store machinery. It cost $2,500 to build, but would cost $8,000 to replace today.

If the barn were destroyed, however, the owner would probably replace it with a pole-frame shed costing $3,000 with a 30-year life and an annual rate of depreciation of $100 a year.

The utility value of the existing barn for its remaining 10 years would be no more than the utility value of the cheaper shed for the same period.

Thus, the insurance value of the barn would be 10 years multiplied by the $100 annual depreciation rate of the shed, or $1,000.

Utility, however, is only one way of valuing obsolete buildings for insurance purposes. Earning capacity, current cost of rebuilding, and sales or market value are others.

Homework

Here's one equation for determining the utility value of an existing building:

$$Vu = \frac{Cu\ k}{N}$$

where:

- Vu = Utility value of existing building.
- Cu = Cost of a new building.
- N = Length of life of new building in years.
- k = Remaining years of life of existing building.

Using figures from the example given in the accompanying article, the equation looks like this:

$$\$1{,}000 = \frac{\$3{,}000 \times 10}{30}$$

Therefore, the utility value of the existing building is $3,000 (cost of new building) multiplied by 10 (years remaining of old building) divided by 30 (years of life of new building), or $1,000.

Now try it on your old barn, garage, or toolshed.

MEET THE STATE STATISTICIAN . . .

JERRY FLUKE

"East is East," they say, but the twain did meet in 1963, when W. J. Fluke became statistician in charge of the New Jersey crop reporting service.

Nearly a native westerner, Fluke spent his youth and many years of his career in Oregon. Today, surveying the farmlands and wooded hills of the Garden State might remind him of the family farm and the forests back home.

A ready understanding of a new area of the country is natural for Jerry Fluke. As he recently observed, "My service with USDA has spanned the continent, and over 25 years . . ." But even that remark doesn't reveal the full odyssey of Jerry Fluke.

He was born in 1914. Where? Not the West or East, but about halfway and a bit to the north—in Winnipeg, Canada. Before he was 6, though, Jerry's family had moved west to British Columbia, and then south to Oregon.

They bought a fruit farm in Tigard near Portland. Jerry grew up there, then attended Oregon Agricultural College (now Oregon State University), and graduated in 1936 with a B.S. degree in agricultural economics.

With the start of his career in the Department of Agriculture, the odyssey resumed.

Lincoln, Nebr., was his first base in 1939. Sterner responsibilities later dictated a move to Europe, where Jerry served as an artillery officer during the war.

Back home, literally, in 1945, he resumed his career as a statistician, in the Portland office of the crop reporting service. During 1956, he was instrumental in producing the first statistical bulletin of the Northwest wheat project on supply and distribution of the region's principal crop.

Beginning in 1957, Jerry spent 4 years by the Potomac, where his knowledge of Oregon's varied field and seed crops was vital to the field crop estimation program. The next assignment, in the Indiana crop reporting service, lasted until 1963, when the most recent move brought him to New Jersey.

The variety encompassed by this State is ideally tailored for a man of such broad background. The farmers of New Jersey are innovators, who produced our first U.S. Commissioner of Agriculture, and began an early coexistence with heavy industries and large cities. Today, a bountiful crop of agricultural statistics insures a brisk pace in Fluke's office.

The results are gratifying. Two-thirds of the land in this seventh-ranking industrial State is still devoted to agricultural, recreational, and forest uses. The farmland has the highest cash receipts per acre in the Nation.

The Fluke family reflects a diversity of agricultural and professional interests. Betsy, Jerry's wife, has a degree in home economics from Oregon State University, and used to work for the Oregon crop reporting service.

The Flukes have a daughter, Kathleen, in high school. And two sons have already begun to carry on the family odyssey. Bill, a Marine stationed in North Carolina, will again take up his studies this fall at Duke University. Bob attends Shippensburg State College in Pennsylvania.

SAM STAT SAYS "Check My Data"

A brief roundup

■ Highlights from a report on last year's field and seed crops: rice production rose by over 11 percent; wheat output remained at 1.3 billion bushels, but the gain in average price was 28 cents; the volume of soybeans raised for beans was 931 million bushels, or 10 percent more than in 1965. ■ Celery was planted on 12,100 acres in Florida and California this season. ■ All varieties of grapes grown last year amounted to 3.7 million tons, down 14 percent from the previous year. ■ Farmers fed their cows an average of 37.8 pounds of grains and other concentrates for each hundredweight of milk produced last year, 3.7 pounds more than the 1960–64 average. ■ Last year's pear harvest, weighing nearly 750,000 tons, was about 50 percent larger than in 1965, and the biggest in 10 years.

In This Issue

Editor: Ben Blankenship

Cost-Price Squeeze Tightens

Cash income to farmers for 1967 is expected to approach the record highs set last year, despite prospects for a continued squeeze between higher production expenses and lower prices.

Realized gross income from farming will likely equal last year's record of $49.5 billion, given average weather and continued strong demand for farm products.

With a larger volume of farm marketings offsetting lower prices, cash receipts will probably change little from the $42.9 billion estimated for 1966. An additional $6.6 billion is expected again from non-money income and direct Government payments.

Despite the high level of gross income in prospect, a decline of perhaps 5 percent, or more, is indicated from the realized net farm income of 1966, a near-record $16.3 billion. Thus, even with a continuing decline in the number of farms, average per-farm income from farming this year may be down some from last year's record of $5,024.

The decline in realized net income from farming stems from a projected rise in production expenses. Prices paid by farmers and overhead costs will be up, leading to an increase of around $1 billion.

Disposable personal income from all sources, however, may change little from the 1966 record high, with continued high levels of employment in prospect, as well as further increases in nonfarm income.

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